NEW SOURCE CONSTRUCTION PERMIT and MINOR SOURCE OPERATING PERMIT OFFICE OF AIR QUALITY

Jayco, Inc.
10758 County Road 2
Middlebury, Indiana 46540

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

This permit is also issued under the provisions of 326 IAC 2-2, 40 CFR 52.21, and 40 CFR 52.124 (Prevention of Significant Deterioration), with conditions listed on the attached pages.

This permit is also issued under the provisions of 326 IAC 2-3 (Emission Offset), with conditions listed on the attached pages

Operation Permit No.: MSOP 039-12712-00528	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: April 19, 2001 Expiration Date: April 19, 2006

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary recreational vehicle production source.

Authorized Individual:	Paul Geczy
Source Address:	10758 County Road 2, Middlebury, Indiana 46540
Mailing Address:	903 S. Main Street, P.O. Box 460, Middlebury, Indiana 46540
Phone Number:	219 - 825 - 0537
SIC Code:	3792
County Location:	Elkhart
County Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Minor Source, under PSD Rules; Major Source, Section 112 of the Clean Air Act

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

(a) One (1) mini-motor home assembly line, known as L-3, exhausting inside the building, capacity: 4 recreational vehicles per hour.

(b) One (1) lamination line, known as Lamination-A, exhausting inside the building, capacity: 4 laminate materials per hour.

(c) One (1) woodworking operation, known as WW-1, equipped with a cyclone, known as CE-22, exhausting to Stack P50-1, capacity: 1,100 pounds of wood per hour.

(d) One (1) Class A Motor Home Production line consisting of:

(1) Three (3) assembly lines, known as CAL-1, CAL-2 and CAL-3, exhausted internally, capacity: 1.5 fiberglass motor homes per hour, each.

(2) One (1) lamination line, known as Lamination, exhausted internally, capacity: 3.0 fiberglass motor homes per hour.

(3) Three (3) sealer/basecoat booths, known as SB1-1, SB2-1 and SB3-1, equipped with HVLP spray applicators and dry filters for PM overspray control, exhausted through Stacks P52-1, P52-2 and P52-3, respectively, capacity: 3.0 fiberglass motor homes per hour, each.

(4) Three (3) topcoat booths, known as SB1-2, SB2-2 and SB3-2, equipped with HVLP spray applicators and dry filters for PM overspray control, exhausted through Stacks P52-4, P52-5 and P52-6, respectively, capacity: 3.0 fiberglass motor homes per hour, each.

(5) Three (3) clearcoat/cure booths, known as SB1-3, SB2-3 and SB3-3, equipped with HVLP spray applicators and dry filters for PM overspray control, exhausted through Stacks P52-7, P52-8 and P52-9, respectively, capacity: 3.0 fiberglass motor homes per hour, each.

(6) One (1) undercoat room, known as SB-4, equipped with HVLP spray applicators and dry filters for PM overspray control, exhausted through stack P52-10, capacity: 4 motor homes metal frames per hour.

(7) Five (5) MIG welding stations, known as MIG-1, capacity: 5 pounds of welding wire per hour, each.

(8) Three (3) natural gas-fired rotary space heaters, rated at 0.45 million British thermal units per hour.

(9) Natural gas-fired makeup air units, rated at 2.0 million British thermal units per hour, total.

(10) Three (3) natural gas-fired curing ovens, rated at 3.4 million British thermal units per hour, each.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC 13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled “Minor Source Operating Permit”, all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.6 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

(a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section.

(1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.

(2) If the Affidavit of Construction does not verify that the facilities covered in this Construction Permit were constructed as proposed in the application, then the Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section prior to beginning operation of the facilities.

(b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

(c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.

(d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-7-19 (Fees).

(e) Pursuant to 326 IAC 2-7-4(a)(1)(A)(ii) and 326 IAC 2-5.1-4, the Permittee shall apply for a Title V operating permit within twelve (12) months of the date on which the source first meets an applicability criterion of 326 IAC 2-7-2.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

(a) The total source potential to emit VOC is limited to less than two hundred fifty (250), tons per year. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.

(b) Any change or modification which may increase potential to emit to two hundred fifty (250) tons per year from this source, shall cause this source to be considered a major source under PSD, 326 IAC 2-2 and 40 CFR 52.21, and shall require approval from IDEM, OAQ prior to making the change.

C.2 Hazardous Air Pollutants (HAPs) [326 IAC 2-7]

Any change or modification which may increase potential to emit to ten (10) tons per year of any single hazardous air pollutant, twenty-five (25) tons per year of any combination of hazardous air pollutants from this source, shall cause this source to be considered a major source under Part 70 Permit Program, 326 IAC 2-7, and shall require approval from IDEM, OAQ prior to making the change.

C.3 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.4 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

(a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

C.4 Source Modification [326 IAC 2-7-10.5]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-10.5 whenever the Permittee seeks to construct new emissions units, modify existing emissions units, or otherwise modify the source.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule.

C.5 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

C.6 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)]:

(a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.

(b) The written notification shall be sufficient to transfer the permit to the new owner by a notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).

(c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.7 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

(a) Violation of any conditions of this permit.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.8 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

C.9 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.10 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

Testing Requirements

C.11 Performance Testing [326 IAC 3-6] [326 IAC 2-1.1-11]

(a) Compliance testing on new emissions units shall be conducted within sixty (60) days after achieving maximum production rate, but no later than one hundred eighty (180) days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two (2) weeks prior to the test date.

(b) All test reports must be received by IDEM, OAQ, within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Compliance Monitoring Requirements

C.12 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.13 Maintenance of Monitoring Equipment [IC 13-14-1-13]

(a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.

(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.14 Monitoring Methods [326 IAC 3]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.15 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this permit;

(3) The Compliance Monitoring Requirements in Section D of this permit;

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:

(A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and

(B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.

(c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;

(3) An automatic measurement was taken when the process was not operating; or

(4) The process has already returned to operating within "normal" parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken.

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected emissions unit while the corrective actions are being implemented. IDEM, OAQ shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAQ within thirty (30) days of receipt of the notice of deficiency. IDEM, OAQ reserves the authority to use enforcement activities to resolve noncompliant stack tests.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected emissions unit.

The documents submitted pursuant to this condition do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Record Keeping and Reporting Requirements

C.17 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.

(b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

(c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a) (1) through (6).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.18 Annual Emission Statement [326 IAC 2-6]

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

(1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

(2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.

(b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.19 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) With the exception of performance tests conducted in accordance with Section C- Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.

(b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.

(c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

(d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

(e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

(f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.20 General Record Keeping Requirements [326 IAC 2-6.1-2]

(a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Records of required monitoring information shall include, where applicable:

(1) The date, place, and time of sampling or measurements;

(2) The dates analyses were performed;

(3) The company or entity performing the analyses;

(4) The analytic techniques or methods used;

(5) The results of such analyses; and

(6) The operating conditions existing at the time of sampling or measurement.

(c) Support information shall include, where applicable:

(1) Copies of all reports required by this permit;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

(4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

(d) All record keeping requirements not already legally required shall be implemented when operation begins.

C.21 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(d) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

(1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or

(2) A malfunction as described in 326 IAC 1-6-2; or

(3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.

(4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.

(e) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.

(f) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

C.22 Annual Notification [326 IAC 2-6.1-5(a)(5)]

(a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

(b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will

achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.

(c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Data Section, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) mini-motor home assembly line, known as L-3, exhausting inside the building, capacity: 4 recreational vehicles per hour.

(b) One (1) lamination line, known as Lamination-A, exhausting inside the building, capacity: 4 laminate materials per hour.

(c) One (1) woodworking operation, known as WW-1, equipped with a cyclone, known as CE-22, exhausting to Stack P50-1, capacity: 1,100 pounds of wood per hour.

(d) One (1) Class A Motor Home Production line consisting of:

(1) Three (3) assembly lines, known as CAL-1, CAL-2 and CAL-3, exhausted internally, capacity: 1.5 fiberglass motor homes per hour, each.

(2) One (1) lamination line, known as Lamination, exhausted internally, capacity: 3.0 fiberglass motor homes per hour.

(3) Three (3) sealer/basecoat booths, known as SB1-1, SB2-1 and SB3-1, equipped with HVLP spray applicators and dry filters for PM overspray control, exhausted through Stacks P52-1, P52-2 and P52-3, respectively, capacity: 3.0 fiberglass motor homes per hour, each.

(4) Three (3) topcoat booths, known as SB1-2, SB2-2 and SB3-2, equipped with HVLP spray applicators and dry filters for PM overspray control, exhausted through Stacks P52-4, P52-5 and P52-6, respectively, capacity: 3.0 fiberglass motor homes per hour, each.

(5) Three (3) clearcoat/cure booths, known as SB1-3, SB2-3 and SB3-3, equipped with HVLP spray applicators and dry filters for PM overspray control, exhausted through Stacks P52-7, P52-8 and P52-9, respectively, capacity: 3.0 fiberglass motor homes per hour, each.

(6) One (1) undercoat room, known as SB-4, equipped with HVLP spray applicators and dry filters for PM overspray control, exhausted through stack P52-10, capacity: 4 motor homes metal frames per hour.

(7) Five (5) MIG welding stations, known as MIG-1, capacity: 5 pounds of welding wire per hour, each.

(8) Three (3) natural gas-fired rotary space heaters, rated at 0.45 million British thermal units per hour.

(9) Natural gas-fired makeup air units, rated at 2.0 million British thermal units per hour, total.

(10) Three (3) natural gas-fired curing ovens, rated at 3.4 million British thermal units per hour, each.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

D.1.1 Volatile Organic Compound (VOC) [326 IAC 8-2-9]

(a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating applied to metal frames coated in the undercoating room shall be limited to 3.5 pounds of VOCs per gallon of coating less water, as delivered to the applicator for any calender day, extreme performance coatings.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

(b) Pursuant to CP 039-11317-00528, the amount of VOC delivered to the applicators in L-3 and Lamination A shall each be less than fifteen (15) pounds per day and therefore, the requirements of 326 IAC 8-2-9 do not apply.

D.1.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

The Class A Motor Home Production line shall use less than 233 tons of VOC, including coatings, dilution solvents, and cleaning solvents, per twelve (12) consecutive month period. This usage limit is required to limit the potential to emit of VOC to less than 250 tons per year for the entire source. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

D.1.3 HAPs [326 IAC 2-4.1-1]

The amount of any single HAP and combination of HAPs delivered to the applicators of the Class A Motor Home Production Line shall be limited to less than ten (10) and less than twenty-five (25) tons per twelve (12) month consecutive period, respectively. Therefore, the requirements of 326 IAC 2-4.1-1 (New source toxics control) do not apply.

D.1.4 Particulate Matter (PM) [326 IAC 6-3-2(c)]

(a) Pursuant to 326 IAC 6-3-2, the PM from the nine (9) spray booth, known as SB1-1, SB2-1, SB-3-1, SB1-2, SB2-2, SB3-2, SB1-3, SB2-3, and SB3-3, shall not exceed the pound per hour emission rate established as E in the formula below:

(b) Pursuant to 326 IAC 6-3-2, the PM from the nine (9) spray booths, known as SB1-1, SB2-1, SB-3-1, SB1-2, SB2-2, SB3-2, SB1-3, SB2-3, and SB3-3 as well as the undercoat room, known as SB-4, shall not exceed the pound per hour emission rate established as E in the formula below:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

or

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.5 New facilities: general reduction requirements [326 IAC 8-1-6]

The Best Available Control Technology (BACT) for the proposed Class A Motor Home Production line has been determined to be utilizing high transfer efficiency HVLP spray technology, good house keeping practices and a VOC usage limit of less than 233 tons per year delivered to the applicators.

The preparation and maintenance of a written work practice implementation plan shall be accomplished within sixty (60) calendar days after permit issuance. The work practice implementation plan must define environmentally desirable work practices for each coating manufacturing operation and at a minimum address each of the following work practice standards:

(a) Operator training course.

(b) Leak inspection and maintenance plan.

(c) Spray gun cleaning.

(d) The cleanup solvent containers used to transport solvent from drums to work stations be closed containers having soft gasketed closures.

(e) The application equipment operators shall be instructed and trained on the methods and practices utilized to minimize spillage on the floor and over application.

(f) Storage containers used to store VOC and/or HAPs containing materials shall be kept covered when not in use.

(g) Cleanup solvents will be reused in the process as much as possible to reduce hazardous waste and the related impact on the environment.

(h) Odd lot/batch overrun coatings will be reused as much as possible to reduce hazardous waste and the related impact on the environment.

D.1.6 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for the nine (9) spray booths, known as SB1-1, SB2-1, SB-3-1, SB1-2, SB2-2, SB3-2, SB1-3, SB2-3, and SB3-3 as well as the undercoat room, SB-4, and any control devices.

Compliance Determination Requirements [326 IAC 2-1.1-11]

D.1.7 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.1.1, D.1.2 and D.1.5 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer.

D.1.8 VOC and HAPs Emissions

Compliance with Conditions D.1.2, D.1.3 and D.1.5 shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound and HAPs usage for the twelve (12) month period.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.9 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times when the nine (9) spray booths, known as SB1-1, SB2-1, SB-3-1, SB1-2, SB2-2, SB3-2, SB1-3, SB2-3, and SB3-3 as well as the undercoat room, SB-4, are in operation.

D.1.10 Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks (P52-1 through P52-10) while one (1) or more of the booths or room are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.11 Record Keeping Requirements

(a) To document compliance with Condition D.1.1(a), the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken daily and shall be complete and sufficient to establish compliance with the VOC content limit of Condition D.1.1(a).

(1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) A log of the dates of use; and

(3) The weight of VOCs emitted for each compliance period.

(b) To document compliance with Condition D.1.1(b), the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken daily and shall be complete and sufficient to establish compliance with the VOC usage limits and the VOC emission limits established in Condition D.1.1(b).

(1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) A log of the dates of use;

(3) The total VOC usage for each day; and

(4) The weight of VOCs emitted for each compliance period.

(c) To document compliance with Conditions D.1.2, D.1.3 and D.1.5 the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC and HAPs usage limits and the VOC and HAPs emission limits established in Conditions D.1.2, D.1.3 and D.1.5.

(1) The amount, VOC content and HAPs content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) A log of the dates of use;

(3) The cleanup solvent usage for each month;

(4) The total VOC and HAPs usage for each month; and

(5) The weight of VOCs and HAPs emitted for each compliance period.

(d) To document compliance with Condition D.1.10, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

(e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.12 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.2, D.1.3 and D.1.5 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(c) One (1) woodworking operation, known as WW-1, equipped with a cyclone, known as CE-22, exhausting to Stack P50-1, capacity: 1,100 pounds of wood per hour.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

D.2.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the woodworking facilities shall not exceed 2.75 pounds per hour when operating at a process weight rate of 1,100 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

Compliance Determination Requirements [326 IAC 2-1.1-11]

D.2.2 Particulate Matter (PM)

The cyclone for PM control shall be in operation at all times when the woodworking processes are in operation.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.3 Cyclone Inspections

An inspection shall be performed each calender quarter of all cyclones controlling the woodworking operation when venting to the atmosphere. A cyclone inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors.

D.2.4 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

Record Keeping and Reporting Requirement [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.5 Record Keeping Requirements

(a) To document compliance with Condition D.2.3, the Permittee shall maintain records of the results of the inspections required under Condition D.2.3 and the dates the vents are redirected.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Data Section
Quarterly Report

Company Name: Jayco, Inc.
Location: 10758 County Road 2, Middlebury, Indiana 46540
Permit No.: MSOP 039-12712-00528
Facilities: Class A Motor Home Production Line
Pollutant: VOC
Limit: Less than 233 tons per twelve (12) consecutive month period

Year: _____

Month	VOC (tons)	VOC (tons)	VOC (tons)
	This Month	Previous 11 Months	12 Month Total

Submitted by:_____

Title/Position:_____

Signature:_____

Date:_____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Data Section
Quarterly Report

Company Name: Jayco, Inc.
Location: 10758 County Road 2, Middlebury, Indiana 46540
Permit No.: MSOP 039-12712-00528
Facilities: Class A Motor Home Production Line
Pollutant: HAPs
Limit: Less than ten (10) tons per twelve (12) consecutive month period for a single HAP and less than twenty-five (25) tons per twelve (12) consecutive month period for the combination of HAPs

Year: _____

Month	Single HAP (tons)	Combination of HAPs (tons)	Single HAP (tons)	Combination of HAPs (tons)	Single HAP (tons)	Combination of HAPs (tons)
	This Month	This Month	Previous 11 Months	Previous 11 Months	12 Month Total	12 Month Total

Submitted by:_____

Title/Position:_____

Signature:_____

Date:_____

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-5967

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES ?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100 TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: _____ PHONE NO. :_____
LOCATION: (CITY AND COUNTY) _____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____
_____

DATE/TIME MALFUNCTION STARTED: _____/_____/ 20_____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE_____/_____/ 20____ _____ AM / PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

_____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

_____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____
INTERIM CONTROL MEASURES: (IF APPLICABLE) _____
_____
_____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

*** Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	**Jayco, Inc.**
Address:	**10758 County Road 2**
City:	**Middlebury, Indiana 46540**
Phone #:	**219 825-0537**
MSOP #:	**039-12712-00528**

I hereby certify that Jayco, Inc is
9 still in operation.
9 no longer in operation.

I hereby certify that Jayco, Inc. is
9 in compliance with the requirements of MSOP **039-12712-00528**.
9 not in compliance with the requirements of MSOP **039-12712-00528**.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a New Source Construction and Minor Source Operating Permit

Source Background and Description

Source Name:	**Jayco, Inc.**
Source Location:	**10758 County Road 2, Middlebury, Indiana 46540**
County:	**Elkhart**
SIC Code:	**3792**
Operation Permit No.:	**MSOP 039-12712-00528**
Permit Reviewer:	**Frank P. Castelli**

The Office of Air Quality (OAQ) has reviewed an application from Jayco, Inc. relating to the construction and operation of a recreational vehicle production source. The source is proposing to add a Class A Motor Home assembly line to their existing permitted source. The source is currently operating under a Source Specific Operating Agreement (SSOA). The addition of the proposed Class A Motor Home assembly line will make it impossible to comply with the conditions of the SSOA; therefore a Minor Source Operating Agreement (MSOP) is proposed and Jayco will apply for a Part 70 Operating Permit within twelve (12) months of the issuance of this permit. This MSOP will cover the existing and the proposed facilities at this source.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(a) One (1) mini-motor home assembly line, known as L-3, exhausting inside the building, installed in 1999, capacity: 4 recreational vehicles per hour.

(b) One (1) lamination line, known as Lamination-A, exhausting inside the building, installed in 1999, capacity: 4 laminate materials per hour.

(c) One (1) woodworking operation, known as WW-1, equipped with a cyclone, known as CE-22, exhausting to Stack P50-1, installed in 1999, capacity: 1,100 pounds of wood per hour.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

New Emission Units and Pollution Control Equipment

The application includes information relating to the construction and operation of the following equipment:

(d) One (1) Class A Motor Home Production line to be installed in 2001 consisting of:

(1) Three (3) assembly lines, known as CAL-1, CAL-2 and CAL-3, exhausted internally, capacity: 1.5 fiberglass motor homes per hour, each.

(2) One (1) lamination line, known as Lamination, exhausted internally, capacity: 3.0 fiberglass motor homes per hour.

(3) Three (3) sealer/basecoat booths, known as SB1-1, SB2-1 and SB3-1, equipped with HVLP spray applicators and dry filters for PM overspray control, exhausted through Stacks P52-1, P52-2 and P52-3, respectively, capacity: 3.0 fiberglass motor homes per hour, each.

(4) Three (3) topcoat booths, known as SB1-2, SB2-2 and SB3-2, equipped with HVLP spray applicators and dry filters for PM overspray control, exhausted through Stacks P52-4, P52-5 and P52-6, respectively, capacity: 3.0 fiberglass motor homes per hour, each.

(5) Three (3) clearcoat/cure booths, known as SB1-3, SB2-3 and SB3-3, equipped with HVLP spray applicators and dry filters for PM overspray control, exhausted through Stacks P52-7, P52-8 and P52-9, respectively, capacity: 3.0 fiberglass motor homes per hour, each.

(6) One (1) undercoat room, known as SB-4, equipped with HVLP spray applicators and dry filters for PM overspray control, exhausted through stack P52-10, capacity: 4 motor homes metal frames per hour.

(7) Five (5) MIG welding stations, known as MIG-1, capacity: 5 pounds of welding wire per hour, each.

(8) Three (3) natural gas-fired rotary space heaters, rated at 0.45 million British thermal units per hour.

(9) Natural gas-fired makeup air units, rated at 2.0 million British thermal units per hour, total.

(10) Three (3) natural gas-fired curing ovens, rated at 3.4 million British thermal units per hour, each.

Permitted Emission Units and Pollution Control Equipment, Never Constructed or Were Removed

(e) One (1) surface coating booth, known as SB-8, capacity: 0.625 recreational vehicles per hour or 15 recreational vehicles per day. (never installed, permitted by CP 039-11317-00528)

(f) One (1) mini-motor home assembly line, known as L-51, which includes adhesives, solvent wiping, caulking and touch-up painting, exhausting inside the building, capacity: 4 recreational vehicles per hour. (removed from service, permitted by S 039-11584-00528)

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) Registration CP 039-11317-00528, issued November 9,1999; and

(b) S 039-11584 issued on January 25, 2000.

All conditions from previous approvals were incorporated into this permit except the following:

S 039-11584 issued on January 25, 2000:

> All conditions were not incorporated into this MSOP because the proposed MSOP will supercede the SSOA and a Part 70 Operating Permit application will be submitted to OAQ within twelve (12) months of the issuance date of this proposed permit.

Source Definition

This recreational vehicle company consists of two (2) plants:

(a) Plant 1 (Middlebury Plant) is located at 903 South Main Street in Middlebury; and

(b) Plant 2 (North Plant) is located at 10758 County Road 2 in Middlebury.

The plants are under common control. The plants have the same SIC code. The plants are not contiguous or adjacent. They are located eight (8) miles apart from each other. The plants will operate as separate producers of different recreational vehicle lines. There will be a minimal exchange of material between the two (2) plants, possibly ten percent (10%). Therefore, the Middlebury and the North Plants will be treated as separate sources. The Middlebury Plant, located at 903 South Main Street in Middlebury was issued a Part 70 Operating Permit, T 039-5080-00265, on June 30, 1999.

Stack Summary

The stack parameters for the proposed Class A Motor Home Production line, Stacks P52-1 through P52-10, are not known at this time.

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
P50-1	Woodworking	18.0	1.25	4,000	68

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on September 15, 2000, with additional information received on November 10, 2000 and January 5, 8 and 12, 2001.

Emission Calculations

See pages 1 through 5 of 5 of Appendix A of this document for detailed emissions calculations.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	**Potential To Emit** (tons/year)
PM	greater than 100, less than 250
PM_{10}	greater than 100, less than 250
SO_2	less than 100
VOC	greater than 250
CO	less than 100
NO_X	less than 100

HAPs	**Potential To Emit** (tons/year)
Toluene	34.0
Ethyl benzene	3.10
Xylene	13.5
MEK	10.4
MIBK	0.100
Hexane	61.7
Methylene Chloride	16.2
TOTAL	139

The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of VOC and PM_{10} are equal to or greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1.

Actual Emissions

No previous emission data have been received from the source.

Limited Potential to Emit of Entire Source

The table below summarizes the total potential to emit, reflecting all limits, of all the emission units at this source including the proposed modification.

	Limited Potential to Emit (tons/year)						
Process/facility	**PM**	**PM_{10}**	**SO_2**	**VOC**	**CO**	**NO_x**	**HAPs**
Mini-Motor Home, L-3	Less than 2.50	Less than 2.50	0.00	12.7	0.00	0.00	7.84
Lamination-A			0.00	3.69	0.00	0.00	3.02
Class A Motor Home Assembly Line (Surface Coating)			0.00	<233	0.00	0.00	<10.0 single <25.0 total
Woodworking, WW-1	0.751	0.751	0.00	0.00	0.00	0.00	0.00
Welding MIG-1	2.64	2.64	0.00	0.00	0.00	0.00	0.005
Natural Gas Combustion	0.113	0.451	0.036	0.326	4.99	5.93	0.112
Total Emissions	6.00	6.34	0.036	<250	4.99	5.93	<36.0

(a) The VOC from the proposed Class A Motor Home line has been limited to less than 233 tons per twelve (12) consecutive month period to remain a minor source pursuant to 326 IAC 2-2.

(b) Single and combination of HAPs from the proposed Class A Motor Home line has been limited to less than ten (10) and twenty-five (25) tons per twelve (12) consecutive month period, respectively, to render the requirement of 326 IAC 2-4.1-1

County Attainment Status

The source is located in Elkhart County.

Pollutant	**Status**
PM_{10}	attainment
SO_2	attainment
NO_2	attainment
Ozone	maintenance
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_X) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as maintenance for ozone. Therefore, VOC and NO_X emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Elkhart County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	**Emissions** (ton/yr)
PM	less than 100
PM_{10}	less than 100
SO_2	0.00
VOC	16.4
CO	0.00
NO_X	0.00

(a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.

(b) These emissions were based on information contained in the application for this MSOP for the existing permit L-3 and Lamination A facilities.

Proposed Modification

PTE from the proposed modification (based on 8,760 hours of operation per year at rated capacity including enforceable emission control and production limit, where applicable):

Pollutant	**PM** (ton/yr)	**PM_{10}** (ton/yr)	**SO_2** (ton/yr)	**VOC** (ton/yr)	**CO** (ton/yr)	**NO_x** (ton/yr)
Proposed Modification Class A Motor Home Assembly Line	5.25	5.59	0.036	<233.3	4.99	5.93
PSD Threshold Level	250	250	250	250	250	250

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

After this proposed modification this source will be subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) at least one of the criteria pollutant will be greater than or equal to one hundred (100) tons per year,

(b) a single hazardous air pollutant (HAP) will be greater than or equal to ten (10) tons per year,

(c) any combination of HAPs will be greater than or equal to twenty-five (25) tons/year.

This source shall apply for a Part 70 (Title V) operating permit within twelve (12) months after this source becomes subject to Title V.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14 and 40 CFR Part 63) applicable to this source.

This recreational vehicle plant is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), Subpart JJ because the plant does not manufacture any products in the SIC codes listed in the definition of wood furniture. The wood components manufactured at this source are structural and are not considered furniture.

State Rule Applicability - Entire Source

326 IAC 1-6-3 (Preventive Maintenance Plan)

(a) A Preventive Maintenance Plan is required for the woodworking operation WW-1 because although the allowable PM emissions do not exceed ten (10) pounds per hour, the cyclone control device is necessary for the woodworking operation PM emissions to comply with the requirements of 326 IAC 6-3-2.

(b) A Preventive Maintenance Plan is required for the Class A Motor Home Production Line surface coating operations because the actual VOC emissions are projected to exceed twenty five (25) tons per year without a control device, the VOC emissions are limited pursuant to 326 IAC 8-1-6 and to render the requirements of 326 IAC 2-2 not applicable.

(c) A Preventive Maintenance Plan is not required for Lamination A and L-3 because the actual VOC emissions from each are less than twenty five (25) tons per year without a control device.

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

The VOC emissions from the proposed Class A Motor Home line will be limited to less than 233 tons per year. This VOC emission limit combined with the full potential to emission from the remaining facilities at this source will insure that the total VOC emissions from the entire source remain less than 250 tons per year. Therefore, the requirement of this rule are not applicable to the source.

326 IAC 2-4.1-1 (New source toxics control)

The proposed Class A Motor Home Production line has potential emissions of a single HAP and a combination of HAPs that exceed the major source levels of ten (10) and twenty-five (25) tons per year, respectively. The source has agreed to limit the emissions of a single HAP to less than ten (10) tons per year and a combination of HAPs to less than twenty-five (25) tons per year. Thus, this rule does not apply to the proposed Class A Motor Home Production line.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of VOC in Elkhart County. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 8-1-6 (New facilities: general reduction requirements)

(a) This rule applies to new facilities as of January 1, 1980. Since the potential VOC emissions from L-3 and Lamination A are both less than twenty-five (25) tons per year, this rule does not apply to either of these facilities.

(b) Since the potential VOC emissions from coating fiberglass, plastic and rubber in the proposed Class A Motor Home line are greater than twenty-five (25) tons per year, 326 IAC 8-1-6 applies to this proposed modification.

BACT has been determined to be utilizing high transfer efficiency HVLP spray technology, good housekeeping practices and a VOC usage limit of less than 233 tons per year delivered to the applicators.

The preparation and maintenance of a written work practice implementation plan within sixty (60) calendar days after permit issuance. The work practice implementation plan must define environmentally desirable work practices for each coating manufacturing operation and at a minimum address each of the following work practice standards:

(1) Operator training course.

(2) Leak inspection and maintenance plan.

(3) Spray gun cleaning.

(4) The cleanup solvent containers used to transport solvent from drums to work stations be closed containers having soft gasketed closures.

(5) The application equipment operators shall be instructed and trained on the methods and practices utilized to minimize spillage on the floor and over application.

(6) Storage containers used to store VOC and/or HAPs containing materials shall be kept covered when not in use.

(7) Cleanup solvents will be reused in the process as much as possible to reduce hazardous waste and the related impact on the environment.

(8) Odd lot/batch overrun coatings will be reused as much as possible to reduce hazardous waste and the related impact on the environment.

The primary reason why add-on controls are economically not feasible for this modification is due to the large area required to surface coat the large panels from the motor homes. Consequently, any add-ons would need to control large air flows from each booth which significantly increases the cost. The range of projected annualized costs by Jayco for add on controls ranges from $1,775,376 to $2,463,749. The VOC baseline is 237.5 tons per year which is the full potential for the proposed line. Therefore, if add-on controls with a conservative control efficiency of 95% were utilized, the VOC removed is 225.6 tons per year, equivalent to between $7,870 and $10,921 per ton removed.

326 IAC 8-2-9 (Miscellaneous Metal Coating)

(a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating delivered to the applicator at the undercoating room shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for forced warm air dried coatings when coating metal.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Based on the MSDS for Water-Reducible Gloss Black WRB-9760 with a density of 8.35 pounds per gallons and 1.6 pounds of VOC per gallon submitted by the source used in the undercoating room is in compliance with this requirement.

(b) Pursuant to CP 039-11317-00528, issued November 9,1999; VOC emissions from coating metal in L-3 and Lamination A are limited to less than fifteen (15) pounds per day. Therefore the requirements of 326 IAC 8-2-9 do not apply to these facilities.

326 IAC 6-3-2 (Process Operations)

(a) The spray operations and the welding activities shall comply with 326 IAC 6-3-2(c). The 326 IAC 6-3-2 equations are as follows: $E = 4.10\ P^{0.67}$, where P equals process weight in tons per hour for process weights up to and including sixty thousand (60,000) pounds per hour and E equals the allowable emission rate in pounds per hour.

For process weights in excess of sixty thousand (60,000) pounds per hour, the following equation is used: $E = 55.0\ P^{0.11} - 40$. Compliance for the spray operation will be obtained by the use of dry filters for overspray control.

(b) For the woodworking operation, WW-1, with a process weight rate of 1,100 pounds per hour, the allowable PM emission rate is 2.75 pounds per hour. The controlled potential PM emission rate from the woodworking operation is 0.171 pounds per hour and therefore the woodworking operation complies with this rule.

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

The cyclone, exhausted through Stack P50-1, shall be in operation at all times when the woodworking activities are in operation, in order to comply with this limit.

Testing Requirements

Stack testing of the woodworking operation cyclone emissions are not being required because the control efficiency stated by the applicant of 95% is within the normal range of control for this type of operation and control device. Furthermore, the uncontrolled potential PM emissions from the woodworking operation are less than twenty-five (25) tons per year.

Conclusion

The construction and operation of this recreational vehicle production source shall be subject to the conditions of the attached proposed New Source Construction and Minor Source Operating Permit MSOP 039-12712-00528.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the
Technical Support Document for New Construction and Operation

Source Name:	**Jayco, Inc.**
Source Location:	**10758 County Road 2, Middlebury, Indiana 46540**
County:	**Elkhart**
Construction Permit No.:	**MSOP 039-12712-00528**
SIC Code:	**3792**
Permit Reviewer:	**Frank P. Castelli**

On March 7, 2001, the Office of Air Quality (OAQ) had a notice published in the Elkhart Truth, Elkhart, Indiana, stating that Jayco, Inc. had applied for a construction permit to construct and operate a recreational vehicle production facility. The notice also stated that OAQ proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On March 8, 2001, John Auld of Jayco, submitted comments on the proposed construction permit. The summary of the comments and corresponding responses are as follows: The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded.**

Comment 1:

Condition D.2.4, Visible Emission Notations - This condition requires daily visible emission notations for the woodworking cyclone stack. The emission rate before controls is 3.45 pounds per hour and the allowable emissions are 2.75 pounds per hour. Given that both the emission rate before controls and the allowable emission rate are both less than 10 pounds per hour, we do not believe that compliance monitoring is warranted for this relatively small particulate source.

Response 1:

Since the potential emission rate before controls and the allowable emission rate pursuant to 326 IAC 6-3-2 are both less than ten (10) pounds per hour, the compliance monitoring Condition D.2.4 has been deleted as well as the requirement for a preventive maintenance plan in Condition D.2.2. All subsequent conditions in this section have been re-numbered.

~~D.2.2 Preventive Maintenance Plan [326 IAC 1-6-3]~~

~~A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this woodworking operation and its control device.~~

~~D.2.4 Visible Emissions Notations~~

~~(a) Daily visible emission notations of the woodworking cyclone stack exhaust P50-1 shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.~~

~~(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.~~

~~(c) In the case of batch or discontinuous operations, readings shall be taken during that part~~

~~of the operation that would normally be expected to cause the greatest emissions.~~

~~(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.~~

~~(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.~~

Comment 2:

Condition D.2.5, Cyclone Inspections - We would request that this condition be eliminated since the intent of this condition is already covered by other conditions. Cyclone inspections should more appropriately be included under our Preventive Maintenance Plan, rather than be addressed as a specific permit condition.

Response 2:

The cyclone inspections are necessary to insure that the cyclone is working properly which assures compliance with 326 IAC 6-3-2. Therefore, Condition D.2.5 (now Condition D.2.4) has not been deleted. However, Condition D.2.6 has been added to the permit to require record keeping of the cyclone inspections as follows:

Record Keeping and Reporting Requirement [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.6 Record Keeping Requirements

(a) To document compliance with Condition D.2.4, the Permittee shall maintain records of the results of the inspections required under Condition D.2.4 and the dates the vents are redirected.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Appendix A: Emission Calculations
Woodworking Operations

Company Name: Jayco, Inc.
Address City IN Zip: 10758 County Road 2, Middlebury, Indiana 46540
MSOP: 039-12712
Plt ID: 039-00528
Reviewer: Frank P. Castelli
Date: September 15, 2000

Woodworking

Unit ID	Control Efficiency (%)	Grain Loading per Actual Cubic foot of Outlet Air (grains/cub. ft.)	Gas or Air Flow Rate (acfm.)	Emission Rate before Controls (lb/hr)	Emission Rate before Controls (tons/yr)	Emission Rate after Controls (lb/hr)	Emission Rate after Controls (tons/yr)
CE-22	95.0%	0.005	4000.0	3.43	15.0	0.171	0.751

Methodology

Emission Rate in lbs/hr (after controls) = (grains/cub. ft.) (sq. ft.) ((cub. ft./min.)/sq. ft.) (60 min/hr) (lb/7000 grains)
Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)
Emission Rate in lbs/hr (before controls) = Emission Rate (after controls): (lbs/hr)/(1-control efficiency)
Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

Allowable Rate of Emissions

Methodology

Allowable Emissions = 4.10(Process Weight Rate)^0.67

	Process Rate (lbs/hr)	Process Weight Rate (tons/hr)	Allowable Emissions (lbs/hr)	Allowable Emissions (tons/yr)
CE-22	1100	0.55	2.75	12.0

Appendix A: Welding and Thermal Cutting

Company Name: Jayco, Inc.
Address City IN Zip: 10758 County Road 2, Middlebury, Indiana 46540
MSOP: 039-12712
Plt ID: 039-00528
Reviewer: Frank P. Castelli
Date: September 15, 2000

PROCESS WELDING	Number of Stations	Max. electrode consumption per station (lbs/hr)		EMISSION FACTORS * (lb pollutant / lb electrode) PM = PM10	Mn	Ni	Cr	EMISSIONS (lb/hr) PM = PM10	Mn	Ni	Cr	TOTAL HAPS (lb/hr)
Submerged Arc	0	0		0.036				0.000	0	0.000	0	0.000
Metal Inert Gas (MIG)(ER5154)	5	5		0.0241	0.00003		0.00001	0.603	0.00085	0.000	0.00025	0.001
Stick (E7018 electrode)	0	0		0.0211				0.000	0	0.000	0	0.000
Tungsten Inert Gas (TIG)(carbon steel)	0	0		0.0055				0.000	0	0.000	0	0.000
Oxyacetylene(carbon steel)	0	0		0.0055				0.000	0	0.000	0	0.000

FLAME CUTTING	Number of Stations	Max. Metal Thickness Cut (in.)	Max. Metal Cutting Rate (in./minute)	EMISSION FACTORS (lb pollutant/1,000 inches cut, 1" thick) PM = PM10	Mn	Ni	Cr	EMISSIONS (lbs/hr) PM = PM10	Mn	Ni	Cr	TOTAL HAPS (lb/hr)
Oxyacetylene	0	0	0	0.1622	0.0005	0.0001	0.0003	0.000	0.000	0.000	0.000	0.000
Oxymethane	0	0	0	0.0815	0.0002		0.0002	0.000	0.000	0.000	0.000	0.000
Plasma	0	0	0					0.000	0.000	0.000	0.000	0.000

EMISSION TOTALS	PM = PM10	Mn	Ni	Cr	Total HAPs
Potential Emissions lbs/hr	0.60	0.00	0.00	0.00	0.0011
Potential Emissions lbs/day	14.46	0.02	0.00	0.01	0.03
Potential Emissions tons/year	**2.64**	0.00	0.00	0.00	0.0048

METHODOLOGY

*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column. Consult AP-42 or other reference for different electrode types.
Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)
Cutting emissions, lb/hr: (# of stations)(max. metal thickness, in.)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 1" thick)
Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day
Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/day x 1 ton/2,000 lbs.
Plasma cutting emission factors are from the American Welding Society study published in Sweden (March 1994).
Welding and other flame cutting emission factors are from an internal training session document.
See AP-42, Chapter 12.19 for additional emission factors for welding.

Appendix A: Potential Emissions Calculations
VOC and HAPS
From Surface Coating Operations

PTE Based on Actual Emissions

Company Name: Jayco, Inc.
Address City IN Zip: 10758 County Road 2, Middlebury, Indiana 46540
MSOP: 039-12712
Plt ID: 039-00528
Reviewer: Frank P. Castelli
Date: September 15, 2000

Actual 1997 Emission Based on 2080 Hours of Operation (tons per year)

	Mini-Home L-3		Lamination A		Proposed Class A	Proposed Entire Plant
Toluene	0.930		0.000		**7.15**	8.1
Ethylbenzene	0.032		0.002		**0.711**	0.7
Xylene	0.163		0.012		**3.04**	3.2
MEK	0.031		0.152		**2.29**	2.5
MIBK	0.001		0.000		**0.012**	0.0
Hexane	0.705		0.000		**13.9**	14.6
Methylene Chloride	0.000		0.551		**3.31**	3.9
Total HAPs	1.862		0.717		**30.5**	**33.0**
Total VOC Emissions	**3.01**		**0.877**		**56.4**	**60.3**

Potential Emissions Based on 8760 Hours of Operation (tons per year)

					Proposed	Entire Plant
Toluene	3.917		0.000		**30.1**	34.0
Ethylbenzene	0.135		0.008		**2.99**	3.1
Xylene	0.686		0.051		**12.812**	13.5
MEK	0.131		0.640		**9.65**	10.4
MIBK	0.004		0.000		**0.051**	0.1
Hexane	2.969		0.000		**58.700**	61.7
Methylene Chloride	0.000		2.321		**13.923**	16.2
Total HAPs	7.842		3.020		**128.241**	139.1
Total VOC Emissions	**12.681**		**3.694**		**237.5**	**253.9**

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler

Company Name: Jayco, Inc.
Address City IN Zip: 10758 County Road 2, Middlebury, Indiana 46540
MSOP: 039--12712
Plt ID: 039-00528
Reviewer: Frank P. Castelli
Date: September 15, 2000

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	
13.55	118.70	3 Rotary Heaters @ 0.45 mmBtu/hr each Make-up air units, total 2.0 mmBtu/hr 3 curing oven @ 3.4 mmBtu/hr each

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.113	0.451	0.036	5.93	0.326	4.99

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).
See page 5 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler
HAPs Emissions

Company Name: Jayco, Inc.
Address City IN Zip: 10758 County Road 2, Middlebury, Indiana 46540
Part 70: 039--12712
Plt ID: 039-00528
Reviewer: Frank P. Castelli
Date: September 15, 2000

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.246E-04	7.122E-05	4.451E-03	1.068E-01	2.018E-04

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel	Total HAPs
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	2.967E-05	6.528E-05	8.309E-05	2.255E-05	1.246E-04	0.112

Methodology is the same as page 4.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.